

Claims

1. An organic electroluminescent device comprising:

a substrate;

5 a first electrode formed on the substrate;

a CVD insulating film of a low dielectric constant formed on the first electrode and the substrate, the CVD film having an opening portion for exposing the first electrode;

an organic electroluminescent (EL) layer formed on the opening portion; and

10 a second electrode formed on the organic EL layer.

2. The device as claimed in claim 1, wherein the CVD insulating film is comprised of SiOC.

15 3. The device as claimed in claim 1, wherein the CVD insulating film has a dielectric constant less than about 3.5.

4. The device as claimed in claim 1, wherein the CVD insulating film is formed to have a thickness more than about 1 μ m.

20 5. The organic electroluminescent device comprising:

a substrate;

a thin film transistor formed on the substrate and having an active pattern, a gate insulating film, a gate electrode, and source/drain electrodes;

25 a passivation layer formed on the thin film transistor and the substrate;

a pixel electrode formed on the passivation layer so as to be connected with the thin film transistor;

a CVD insulating film of low dielectric constant formed on the pixel electrode and the passivation layer, the CVD insulating film having an opening portion for exposing the pixel electrode;

an organic EL layer formed on the opening portion; and

5 a metal electrode formed on the organic EL layer and the CVD insulating film of a low dielectric constant.

6. The device as claimed in claim 5, wherein the CVD insulating film is comprised of SiOC.

10

7. The device as claimed in claim 5, wherein the CVD insulating film has a dielectric constant less than about 3.5.

8. The device as claimed in claim 5, wherein the CVD insulating film has
15 a thickness more than about 1 μm .

9. The device as claimed in claim 5, wherein the CVD insulating film and an edge portion of the pixel electrode overlap each other in a width more than about 1 μm .

20

10. An organic electroluminescent device comprising:

a substrate;

a stripe-shaped first electrode formed on the substrate;

a CVD insulating film of low dielectric constant formed on the first
25 electrode and the substrate, the CVD insulating film having an opening portion formed on the first electrode with a tapered shape;

an organic electroluminescent (EL) layer formed on the opening portion; and

a stripe-shaped second electrode formed on the organic EL layer, the stripe-shaped second electrode being arranged to cross the first electrode.

11. The device as claimed in claim 10, wherein the CVD insulating film is
5 comprised of SiOC.

12. The device as claimed in claim 10, wherein the CVD insulating film has a dielectric constant less than about 3.5.

10 13. The device as claimed in claim 10, wherein the CVD insulating film has a thickness more than about 1 μ m.